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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,028	07/09/2003	Mark E. Addis	EH-10778	1533

30188 7590 12/09/2005

PRATT & WHITNEY  
400 MAIN STREET  
MAIL STOP: 132-13  
EAST HARTFORD, CT 06108

EXAMINER

PICKARD, ALISON K

ART UNIT PAPER NUMBER

3673

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/616,028

Applicant(s)

ADDIS, MARK E.

Examiner

Alison K. Pickard

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5,6,8-15,17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,8-15,17 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5, 6, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Flower (5,480,165).

Flower discloses a brush seal comprising a back plate 15, side plate 21, first set of bristles 19, and second set of bristles 17. The first set of bristles 19 has a length greater than the length of the second set. The second set abuts the first set at a point adjacent the joint (near 22) between the plates and substantially along the length of the first set (as seen in Figure 1). The second set 17 are more rigid and have non-interfering lay angles (see Fig. 4).

Regarding claim 6, the range is considered to be disclosed by Flower in that Flower discloses the angles of the bristles can be the same. Thus, the difference would be 0 degrees, which is in the claimed range.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 10-15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flower in view of Millener (5,496,045).

Flower discloses a brush seal comprising a back plate 15, side plate 21, first set of bristles 19, and second set of bristles 17. The first set of bristles 19 has a length greater than the length of the second set. The second set abuts the first set at a point adjacent the joint (near 22) between the plates and substantially along the length of the first set (as seen in Figure 1). The second set 17 are more rigid, do not contact the shaft, and have non-interfering lay angles (see Fig. 4). Flower does not appear to disclose a windage cover attached to the side plate and spaced from the first set of bristles. Millener teaches a brush seal comprising bristles, a back plate, and a front plate. Millener teaches providing a “windage cover” on the front plate 10 to control lifting forces that disrupt the sealing of the bristles. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the side plate of Flower with a cover as taught by Millener to improve the sealing affect by controlling disruptive lifting forces.

Regarding claim 13, the range is considered to be disclosed by Flower in that Flower discloses the angles of the bristles can be the same. Thus, the difference would be 0 degrees, which is in the claimed range.

#### ***Response to Arguments***

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Also, Applicant's previous arguments relating to Flower '165 (e.g. in response of 2/11/05) are unpersuasive. While Flower's Figures disclose various embodiments/configurations

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of elements, Flower's disclosure and claims disclose the brush seal required by Applicant's claims. Applicant had argued that Figure 6 discloses a spacer ring and therefore the bristles sets weren't in contact along a majority of the length. However, it is clear from the disclosure that the spacer ring 25 does not have to be included with any of the embodiments. Figure 6 is just an example of an embodiment. Applicant is directed to Flower's claim 3, which discloses the two bristle sets (wherein the longer one can be adjacent the backing plate), backing plate, and side plate as required by Applicant's claim 1. The spacer ring is later claimed in claim 7 of Flower. Therefore, the brush seal of Figure 6 does not HAVE to have the spacer ring. Thus, the two bristle sets would lie against and be supported by each other (col. 4, lines 38-39).

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 571-272-7062. The examiner can normally be reached on M-F (10-7:30), with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on 571-272-7049. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alison K. Pickard  
Primary Examiner  
Art Unit 3673

AP